

Amendments to the Abstract:

Please insert the following paragraph as the Abstract of the application being filed concurrently herewith:

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for detecting and recovering from a buffer overflow attack are provided. A method of recovering an operation state of a processor from a buffer overflow attack includes: detecting whether a buffer overflow attack is made on any write operation while storing write operations that are potential targets of buffer overflow attacks in a predetermined location instead of an original destination to store write operations; storing the contents stored in the predetermined location at a predetermined interval in the original destination for storing write operations if no buffer overflow attack is detected and discarding unsafe write operations subsequent to a buffer overflow attack if a buffer overflow attack is detected; and ignoring the unsafe write operations subsequent to the buffer overflow attack if a buffer overflow attack is detected. Therefore, a buffer overflow attack occurring in a computer can be effectively detected, and damage of a system which is attacked can be minimized and the system can be recovered or return to the original state before the attack. A system can be effectively protected while minimizing reduction in performance of the computer system according to a method used to implement the present invention, thereby greatly improving the environments under which the computer and the Internet are used.